

The pending claims are claims 1-3, 11 and 13-15. The claims were previously subjected to a restriction requirement, as set forth in the Office Action mailed September 5, 2000. In Applicants' response to the restriction requirement, dated October 2, 2000, Applicants' elected, with traverse, the Group I claims 1-3. Applicants stated as grounds for traversal that "[a]s the elected claims are directed to immunoreactive and/or antigenic determinants of *Eimeria lactate dehydrogenase*, and claims 11, 13 and 15 of Group II are directed to vaccines comprising such proteins and methods for their preparation and use, it is respectfully submitted that the examination of the protein claims and the vaccine claims would cover closely related and overlapping art." It was thus requested that the vaccine claims be examined along with the elected Group I claims.

In the present Office Action (page 2), the Examiner's response to Applicants' election appears directed to a restriction requirement from another application of the Examiner. Specifically, the Examiner refers in the first sentence to "Applicants' election...received on November 2, 2000", whereas Applicants' response was submitted on October 2, 2000. The Examiner also refers to ten groups of claims from among claims 1-42.

For reasons including those in Applicants' response to the restriction requirement on October 2, 2000, Applicants respectfully ask that all the pending claims (claims 1-3, 11 and 13-15, as well as the new claims 16-25) be examined together. MPEP Section 803 also is relevant to the present case, since the search and examination of the entire application can be made without serious burden to the Examiner, and thus should be examined on the merits even though the application is believed to include claims to distinct or independent inventions.

The present application was objected to as not being in compliance with the sequence requirements. The objection is overcome by the accompanying paper entitled "Compliance with Sequence Requirements under 37 CFR §1.821(e)".

Claim 3 was rejected under 35 USC 112, second paragraph, as indefinite. Specifically, the claim was believed to be vague and indefinite in the recitation of "biologically functional equivalent". The Examiner stated in part that "[w]ithout a clear definition as to what constitutes a biologically functional equivalent, one of skill in the art would be unable to replicate the claims." This rejection is traversed for the following reasons.

The claim term "biologically functional equivalent" is defined on page 7, third full paragraph, of the application as "proteins derived from the above noted amino acid sequences, for example, by deletions, insertions and/or substitutions of one or more amino acids, but retain one or more immunogenic determinants of the *Eimeria* antigens, i.e. said variants have one or more epitopes capable of eliciting an immune response in a host animal."

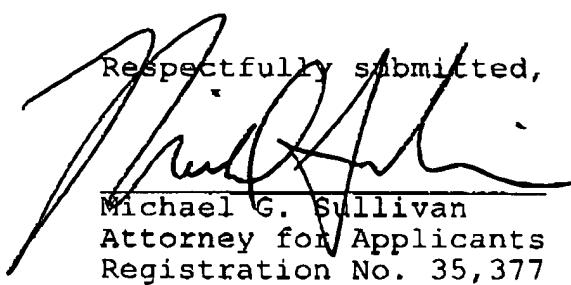
Claim 3 was amended above by replacing the objectionable language ("biologically functional equivalent") with the language "biologically active variant". The amendment is supported by the specification on page 7 and conforms the claim language to accepted U.S. patent practice. The amendment also is believed not to limit the scope of the claim as first written. Accordingly, Applicants ask that the rejection of claim 3 be withdrawn.

Claims 1-3 were rejected under 35 USC 102(b) as anticipated by Wisher et al. The Examiner stated that Wisher et al. disclose an Eimeria protein with a monomeric molecular weight of about 37 kD, and that this 37 kD Eimeria protein is "deemed to be a biologically functional equivalent of the instant claimed 37 kD Eimeria protein". The Section 102 rejection is traversed for the following reasons.

As an initial matter, it is unclear from the Examiner's reasons why the Eimeria protein disclosed by Wisher et al. is believed to be a "biologically functional equivalent" of the claimed protein. Specifically, the Examiner's conclusion appears based only on a comparison of molecular weights.

The Eimeria protein disclosed by Wisher et al. nonetheless is different from the claimed protein, since the proteins labeled and separated by Wisher et al. were obtained from "surface membranes of Eimeria tenella sporozoites" (see Abstract) and "the proteins exposed on the surface membranes of E. tenella sporozoites" (see Introduction). In contrast, the protein of the claimed invention was isolated from the 42-hour developmental stage of Eimeria schizonts" and was found intracellularly in Eimeria (see page 6, second full paragraph). The claimed protein (having immunoreactive and/or antigenic determinants of Eimeria lactate dehydrogenase), to Applicants' knowledge, is not found among surface proteins of Eimeria parasites. Accordingly, Applicants ask that the Section 102 rejection be withdrawn.

In view of the foregoing, the present application is now in condition for allowance. Reconsideration and favorable action are earnestly solicited. In the event any additional fees are due in this application, please charge our Deposit Account Number 02-2334.


Respectfully submitted,
Michael G. Sullivan
Attorney for Applicants
Registration No. 35,377

Attorney Docket No. I/95150 US/D1
Akzo Nobel Patent Department
1300 Piccard Drive, Suite 206
Rockville, Maryland 20850-4373
Tel: (301) 948-7400
Fax: (301) 948-9751

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